

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,622	07/28/2003	Takashi Fujimura	240835US2	4330
22850	7590 10/05/2004		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			ORTIZ, EDGARDO	
	ALEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER
	·		2815	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		M ₁				
	Application No.	Applicant(s)				
	10/627,622	FUJIMURA, TAKASHI				
Office Action Summary	Examiner	Art Unit				
	Edgardo Ortiz	2815				
The MAILING DATE of this communicat Period for Reply	ion appears on the cover sheet w	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communical of the period for reply specified above is less than thirty (30) dated in the period for reply is specified above, the maximum statutor Failure to reply within the set or extended period for reply will, I Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	TION. **CFR 1.136(a). In no event, however, may a ration. ys, a reply within the statutory minimum of thin y period will apply and will expire SIX (6) MON by statute, cause the application to become AB	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed of	n <u>13 September 2004</u> .					
2a) ☐ This action is FINAL . 2b) [This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition for	•					
closed in accordance with the practice u	ınder <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-24</u> is/are pending in the appl	ication.					
4a) Of the above claim(s) 1-22 is/are wit	4a) Of the above claim(s) <u>1-22</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>23 and 24</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction	and/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Ex	kaminer.					
10) The drawing(s) filed on is/are: a)	accepted or b) objected to	by the Examiner.				
Applicant may not request that any objection	to the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the	•					
11)☐ The oath or declaration is objected to by	the Examiner. Note the attached	d Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for the a) All b) Some * c) None of: 1. Certified copies of the priority document of the priority document of the priority document of the certified copies of the application from the International	uments have been received. uments have been received in A ne priority documents have been	Application No				
* See the attached detailed Office action fo	r a list of the certified copies not	received.				
Attachment(s)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-		Summary (PTO-413) s)/Mail Date				
 Notice of Draftsperson's Patent Drawing Review (PTO-3) Information Disclosure Statement(s) (PTO-1449 or PTO Paper No(s)/Mail Date 		nformal Patent Application (PTO-152)				

Application/Control Number: 10/627,622

Art Unit: 2815

DETAILED ACTION

Page 2

Election/Restrictions

1. Applicant's election with traverse of Group II, claims 23-24 received September 13, 2004

is acknowledged. The traversal is on the ground that search and examination of the whole

application can be done without serious burden. This is not found persuasive because the

invention of Group I, claims 1-22 is related to a method of manufacturing a thin-film transistor

as classified in 438/+1, while the invention of Group II is a thin-film transistor as classified in

257/59. They are shown to be different inventions and having a separate status in the art by their

different classifications. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al. (U.S.

patent No. 5,897,346). With regard to Claim 23, Yamaguchi discloses a thin film transistor (see

column 1, lines 8-11) comprising:

an insulating (see column 15, lines 35-36) substrate (111);

a channel region (117) serving as a central portion of a semiconductor layer (112) having

an island shape formed (see figure 11A) on the insulating substrate (111);

Application/Control Number: 10/627,622

Art Unit: 2815

a pair of source (116) and drain (118) regions formed at both sides (see figure 11B) of the channel region (117) in the semiconductor layer (112);

a desorption preventing layer (123) formed to cover (see figure 11C) at least the channel region (117) and the source (116) and drain (118) regions for preventing hydrogen terminating dangling bonds of the semiconductor layer (112) from desorbing from the dangling bonds (see column 16, lines 14-18 and column 19, lines 43-49); and

an interlayer dielectric film (119) formed (see figure 11D) on the desorption preventing layer (123).

With regard to Claim 24, Yamaguchi discloses (column 1, lines 17-20) a display device including a thin-film transistor (TFT) comprising:

an insulating (see column 15, lines 35-36) substrate (111);

a channel region (117) serving as a central portion of a semiconductor layer (112) having an island shape formed (see figure 11A) on the insulating substrate (111);

a pair of source (116) and drain (118) regions formed at both sides (see figure 11B) of the channel region (117) in the semiconductor layer (112);

a desorption preventing layer (123) formed to cover (see figure 11C) at least the channel region (117) and the source (116) and drain (118) regions for preventing hydrogen terminating dangling bonds of the semiconductor layer (112) from desorbing from the dangling bonds (see column 16, lines 14-18 and column 19, lines 43-49); and

an interlayer dielectric film (119) formed (see figure 11D) on the desorption preventing layer (123).

Art Unit: 2815

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo Ortiz whose telephone number is 571-272-1735. The examiner can normally be reached on Monday-Friday (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 571-272-1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

E.O.

A.U. 2815

9/30/04